UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,415	12/28/2001	Terry Alan Torr	10018010-1	1145

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER
LAO, SUE X

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/034,415	TORR ET AL.
	Examiner	Art Unit	
	Sue Lao	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _5/17/2005_.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-28_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _27 and 28_ is/are allowed.

6)☒ Claim(s) _1-11, 16-19, 24-26_ is/are rejected.

7)☒ Claim(s) _12-15 and 20-23_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-28 are pending. This action is in response to the amendment filed 5/17/2005. Applicant has amended claims 7, 10, 16, 18, 14, 27 and 28.

2.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3.   Claims 1-11, 17-19, 25, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al (U S Patent 5,463,772) in view of Celestra ("Celestra Architecture for Serverless Backups").

As to claim 1, Thompson teaches (transparent peripheral file system TPFS) a first code arrangement (file oriented commands, file operation commands) on a computer-readable medium, execution of which causes a processor to generate (issue) a second code arrangement (suitable sequence of commands to the peripheral, including enhancement to the file system operation; sequence of device oriented commands) representing a copy command (read, write) and corresponding parameters thereof (data associated with the file oriented commands), the arrangement comprising:

a calling portion (file oriented commands, file operation commands) in response to which said processor is operable to begin the second-code-arrangement generation process (issue suitable sequence of commands to the peripheral); and

at least one data entity portion (command descriptor block CDB) upon which said generation process operates (adapter converts), wherein each data entity portion identifies a copy device to carry out the copy process (SFSD, col. 29, lines 6-58), a destination device to receive the copied data (data_in, DCP parameter utilities, col. 29, line 59 – col. 31, line 3), desired data that is to be copied (data associated with the file oriented commands) and a source of said desired data (data_out). See col. 16, lines 2-67, col. 17, line 1; col. 18, line 39 - col. 19, lines 1-22; col. 36, line 52 – col. 37, line 20; col. 38, lines 8-35.

While Thompson teaches file copy operations (read, write), Thompson does not explicitly teach that the copy command is a third party copy command, nor that the copy device is a third party copy device.

Celastra teaches file copy operations implemented via third party copy (serverless backups), including third party copy command and third party copy device (Celestra copy). Pages 2-3. Therefore, it would have been obvious to use third party copy command and third party copy device to implement the copy command and copy device in Thompson. One of ordinary skill in the art would have been motivated to combine the teachings of Thompson and Celestra because this would have eliminated scheduling downtime during data protection operations (Celestra, page 1, 5th para.).

As to claims 2, 3, Thomption as modified teaches data structure in the form of an array that includes: an identifier that identifies a copy device; a destination device identifier to identify said destination device; and a source array to identify desired data to be copied and at least one source from which to copy corresponding desired data, data structure in the form of an array that is itself an element in an array of said data entity arrays (Thompson, col. 27, line 30 – col. 31, line 3). Note discussion of claim 1 for third party copy.

As to claim 4, Thomption as modified teaches at least one portion of in-line data that provides context so as to enhance a recovery operation to which said data entity portion is relevant (Celestra, page 3).

As to claim 5, Thompson teaches data entity portion identifies only a single destination to receive said copied data (TPFS, fig. 1).

As to claim 6,. Thompson teaches the desired data is formed of at least two different parts such that said data entity portion correspondingly identifies at least two sources of said different portions, respectively (DCP parameter utilities, col. 29, line 59 – col. 31, line 3).

As to claim 7, Thomption as modified teaches EXTENDED COPY command defined by the Small Computer Systems Interface ("SCSI") standard (Celestra, serverless backups).

As to claims 8, 9, Thompson as modified teaches the first code arrangement is an alphanumeric text string in source code (characters, Thompson, col. 16, lines 60-67), and block within machine-executable code [it is noted that all applications are executed in machine code format. Therefore, it would have been obvious to use machine-executable code as input to the adapter.]

As to claim 10, note discussion of claim 1 and Thompson as modified further teaches application program (application, col. 16, line 64), API (file system calls, col. 26, lines 24-26), copy command generator (adapter 13), the generator begins operation in response to said calling portion (adapter receives and issues, col. 16, lines 2-67; col. 18, lines 39 - col. 19, line 22); and wherein the generator is operable to generate said second code arrangement based upon said data entity portion (adapter receives and issues, col. 16, lines 2-67; col. 18, lines 39 - col. 19, line 22).

As to claim 11, note discussion of claim 7.

As to claim 17, Thompson teaches said host, said API and said generator are each processes running on a server (fig. 1), and wherein said server includes at least one non-volatile memory, at least one processor, and at least one random access memory (RAM) arranged on at least one of: a motherboard where said at least one processor is also located; and on at least one circuit card separate from said mother board (fig. 1).

As to claim 18, it is a method claim of claim 10, thus note claim 10 for discussion.

As to claim 19, note discussion of claim 7.

As to claims 25, 26, Thompson teaches second processor (TPFS machine, fig. 2), same processor (fig. 1).

4.   Claims 16, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al in view of Celestra as applied to claims 10, 18 and further in view of Sparks (U S Patent 5,212,784).

As to claims 16, 24, Sparks teaches if a size of desired data is greater than a target device can accommodate via execution of a single a copy command, generating a plurality of second code arrangements with each one less than all of the desired data (concurrent back up, col. 1, line 65 – col. 2, line 15). Therefore, it would have been obvious to generate a plurality of second code arrangements with each one less than all of the desired data to implement the copying desired data greater than a target device can accommodate via execution of a single a copy command in Thompson as modified. One of ordinary skill in the art would have been motivated to combine the teachings of Thompson as modified with Sparks because this would have achieved copy operation without requiring extraordinary amount of time and without changes to the operating system (Sparks, col. 1, lines 50-59).

5.   Claims 27 and 28 are allowed.

6.   Claims 12-15, 20-23 are objected to as being dependent upon a respective rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the respective base claim and any intervening claims.

7.   Applicant's arguments filed 5/17/2005 have been fully considered but they are not persuasive.

Regarding the Celestra reference, applicant argued that "nowhere does the Celestra ref. indicate the Celestra copy command includes data identifying one from among a plurality of the third party copy engines that is to carry out the third party copy process" and "there is no need to indicate an identity of a third party copy engine within a third party copy command in a circumstance in which there is one and only one third party copy engine provided." (remarks, page 16, first paragraph).

The examiner's response is as follows. First, the argued plurality of the third party copy engines are not claimed. Instead, claim 1 requires "at least one data entity portion, ... each data entity portion identifies a third party coy engine ("3PCE")" (lines 6-8), and similarly claims 10 and 18 require "a third party coy engine ("3PCE")" and "at

least one data entity portion that identifies said 3PCE" (lines 2 and 8). Clearly, one 3PCE and one data entity portion which identifies the one 3PCE meet the claimed limitation.

Second, it is the combination of Thompson and Celestra, rather than Celestra alone, that meets the claimed limitation. In particular, as detailed in the rejection of claim 1, Thompson teaches at least one data entity portion (command descriptor block CDB), each data entity portion identifies a copy device to carry out the copy process (SFSD, col. 29, lines 6-58) (also see col. 16, lines 2-67, col. 17, line 1; col. 18, line 39 - col. 19, lines 1-22; col. 36, line 52 – col. 37, line 20; col. 38, lines 8-35), but does not explicitly teach that the copy command is a third party copy command, nor that the copy device is a third party copy device. Celestra, however, teaches file copy operations implemented by third party copy (serverless backups), including third party copy command and third party copy device (Celestra copy) (Celestra, Pages 2-3). Therefore, the combination of Thompson and Celestra meets "at least one data entity portion, … each data entity portion identifies a third party coy engine ("3PCE")" as claimed.

Applicant further argued that "[a] distinction of independent claim 1 over the Celestra ref., and therefore over the '772 patent as well, is the data entity portion that identifies a third party copy device to carry out the copy process." (remarks, page 16, 2nd paragraph).

The examiner's response is that this feature is met by the combination of Thompson and Celestra in that Thompson teaches at least one data entity portion (command descriptor block CDB) and each data entity portion identifies a copy device to carry out the copy process (SFSD, col. 29, lines 6-58) and Celestra teaches copy operations implemented by third party copy (serverless backups) including third party copy command and third party copy device (Celestra copy), as discussed above. The combination, therefore, meets the data entity portion that identifies a third party copy device to carry out the copy process.

For these reasons, applicant's arguments are not persuasive.

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (571) 272-3764. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (571) 272 3756. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 29, 2005

**SUE LAO
PRIMARY EXAMINER**